

### **REMARKS**

This Amendment and accompanying Request for Continued Examination is submitted in response to the Final Office Action of May 20, 2004 and in further support of the Declaration submitted with the Response filed August 20, 2004 and subsequent conversations between Applicants' representative and the Examiner.

In particular, claims 12, 15, 35 and 36 are amended to specify that, in the first step of the two-step process of the present invention, the carbon monoxide concentration of the treatment-object gas is reduced to approximately 30% or lower of the original carbon monoxide concentration of the treatment-object gas charged into the first step. Support therefor can be found at least at page 8, lines 15-18 of the specification. Claims 16 and 34 are cancelled accordingly, claims 22, 23, 26 and 29 are amended to correct their dependency.

Claims 12-36 stand rejected under 35 U.S.C. §103(a) for obviousness over U.S. Patent No. 6,290,913 to Aoyama. The Aoyama patent discloses an apparatus and method for reducing the concentration of carbon monoxide in a gas. As already pointed out on the record, Aoyama discloses oxidation followed by methanization. In contrast, the present invention is directed to an apparatus and method using methanization followed by oxidation, i.e., the opposite order of steps.

In addition, Applicants submitted a Declaration accompanying the Response filed August 20, 2004 in which the importance of the order of these two reactant steps is clearly demonstrated. The Declaration demonstrates that the process of the present invention of methanization followed by oxidation reduces the total amount of hydrogen consumed relative to a process in which oxidation occurs before methanization as in the Aoyama patent.

In subsequent conversations between the Examiner and Applicants' representative, the Examiner expressed concern that the Declaration is applicable for processes in which the CO concentration of the treatment-object gas is reduced to 30% or less in the first step. As such, Applicants have amended the independent claims to require that in the first step, the CO concentration is reduced to

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approximately 30% or less in order to parallel the technical information reported in the Declaration submitted August 20, 2004.

In view of the previously submitted Declaration and the amendments to claims 12, 15, 35 and 36, claims 12-15, 17-33, 35 and 36 are believed to define over the prior art of record and be in condition for allowance.

Respectfully submitted,

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